

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. *Applicant/Contact name and address:* Shawn Titeca
1643 Main Boulder Rd # A
McLeod, MT 59052-8818
2. *Type of action:* Application for Beneficial Water Use Permit
3. *Water source name:* East Boulder River
4. *Location affected by project:* SE Section 15, T2S, R13E, Sweet Grass County.
5. *Narrative summary of the proposed project, purpose, action to be taken, and benefits:*
The Applicant proposes to divert water from the East Boulder River at 1.5 CFS up to 62.5 AF from May 10 to July 30. The proposed point of diversion is the Miles-Flower ditch headgate located in the SENWSW Section 3, T3S, R13E, Sweet Grass County. The Applicant proposes to irrigate 25 AC using an above ground sprinkler system from May 10 to July 30. The place of use is SE Section 15, T2S, R13E, Sweet Grass County. The project is located approximately 1 mile southeast of McLeod, MT. The DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311 MCA are met.
6. *Agencies consulted during preparation of the Environmental Assessment:*
(include agencies with overlapping jurisdiction)

Montana Natural Heritage Program
Montana Department of Fish Wildlife & Parks (MFWP)
Montana Department of Environmental Quality (MDEQ)
Montana Sage Grouse Habitat Conservation Program
United States Fish and Wildlife Service
United States Natural Resource and Conservation Service

Part II. Environmental Review**1. Environmental Impact Checklist:**

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

Determination: No significant impact

East Boulder River: Forest Boundary – mouth is listed as chronically dewatered by the Montana Department of Fish, Wildlife, and Parks. The Department analysis of physical and legal availability shows there is water in the East Boulder River in excess of the applicant's request and all legal demands within the area of potential impact during the proposed period of diversion and use. The proposed use will not exasperate dewatering on this source considering the proposed point of diversion is so close to the mouth of the East Boulder River and the proposed period of diversion is during periods of high flow.

Water quality - Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.

Determination: No significant impact

The Montana Department of Environmental Quality designates the East Boulder River from Elk Creek to mouth as Use Class B-1, which indicates the water is suitable for all uses after conventional treatment. Impairment related to Flow Regime Modification and Sedimentation on this reach of the East Boulder River are likely caused by water diversions and streambank modifications. The source of impairments related to Chlorophyll-a and other anthropogenic substrate alterations is unknown. The East Boulder River is listed as water quality category 5 by the Montana Department of Environmental Quality. This category includes waters where one or more applicable beneficial uses are impaired or threatened and a TMDL is required to address the factors causing the impairment or threat. This source is listed as fully supporting drinking water and agricultural uses. This source is listed as not fully supporting primary contact recreation or aquatic life. None of these beneficial uses is threatened. The proposed use of water for irrigation through an established headgate and ditch system should not impair water quality on this source.

Groundwater - Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

Determination: No impact

Irrigation may increase groundwater recharge on the 25 acres within the proposed place of use. There should be no impact to groundwater quality due to this proposed use.

DIVERSION WORKS - Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.

Determination: No significant impact.

The Applicant proposes to divert water from the East Boulder River using the Miles-Flower ditch headgate located in SENSW Section 3, T3S, R13E, Sweet Grass County. The water will be conveyed through the ditch to a secondary point of diversion in the SE Section 15, T2S, R13E, Sweet Grass County. A PTO pump with 6-inch suction will be used to divert up to 1.5 CFS out of the ditch into an above ground sprinkler system. The system proposed will utilize a big gun flexible sprinkler to irrigate 25 AC in the SE Section 15, T2S, R13E, Sweet Grass County. No channel impacts, flow modifications, barriers, or impact to riparian areas will result from the proposed diversion works.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species - *Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."*

Determination: No impact

The Montana Natural Heritage Program identifies 3 animal species of concern and one special status species in T2S R13E. The animal species of concern include Grizzly Bear, Golden Eagle, and Harlequin Duck. The Bald Eagle is a special status species in the area. Small Yellow Lady's-slipper is identified as a potential plant species of concern by the Natural Heritage Program. The use of the East Boulder River and an established headgate and ditch system for irrigation on 25 acres should not affect any species of concern or create a barrier to the migration or movement of fish or wildlife.

Wetlands - *Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

Determination: No impact

The project area is not within a wetland, so there should be no impacts to wetlands from this proposed use.

Ponds - *For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

Determination: No impact

There are no ponds associated with this water right application.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - *Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

Determination: Possible minor impact

According to the USDA NRCS Web Soil Survey, the predominate soil types for the proposed place of use are Tamaneen gravelly clay loam (2 to 8 percent slopes), Amor-Castner complex (8 to 15 percent slopes), and Castner channery loam (2 to 15 percent slopes). These soils are characterized as well drained and non-saline to very slightly saline. Sprinkler irrigation of 25 acres should not degrade soil quality. There is potential for sprinkler irrigation to cause soil erosion due to the slope/topography at the proposed place of use. There should be little saline seep from this use of water.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

Determination: No impact

The land owner is expected to prevent the establishment or spread of noxious weeds on their property.

AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

Determination: No impact

There should be no deterioration of air quality due to increased air pollutants from this proposed project.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.*

Determination: NA-project not located on State or Federal Lands.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

Determination: No impact

There should be no significant impacts on other environmental resources of land, energy, and water from this proposed use.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

Determination: No impact

There are no known locally adopted environmental plans or goals. The landowner would be responsible for compliance with local zoning ordinances.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

Determination: No impact

The project is located on private land; this project should have no new impact on recreational or wilderness activities.

HUMAN HEALTH - *Assess whether the proposed project impacts on human health.*

Determination: No significant impact

The project would have no impact on public health.

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*

Yes ___ No X If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: No significant impact.

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

- (a) Cultural uniqueness and diversity? No significant impact.
- (b) Local and state tax base and tax revenues? No significant impact.
- (c) Existing land uses? No significant impact.
- (d) Quantity and distribution of employment? No significant impact.
- (e) Distribution and density of population and housing? No significant impact.
- (f) Demands for government services? No significant impact.
- (g) Industrial and commercial activity? No significant impact.
- (h) Utilities? No significant impact.
- (i) Transportation? No significant impact.
- (j) Safety? No significant impact.

(k) Other appropriate social and economic circumstances? No significant impact.

2. ***Secondary and cumulative impacts on the physical environment and human population:***

Secondary Impacts: None identified.

Cumulative Impacts: There are no other pending applications on this source of water. There should be no significant cumulative impacts.

3. ***Describe any mitigation/stipulation measures:*** There are no mitigation or stipulation measures required.

4. ***Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:*** The reasonable alternatives are to grant the application or the no action alternative. Granting the application would allow the Applicant to irrigate 25 acres on the property. It may be possible for the Applicant to develop an alternate source of water or abandon the proposal. The no-action alternative has no significant environmental advantage over the proposed project.

PART III. Conclusion

1. ***Preferred Alternative*** To authorize the beneficial water use permit.

2. ***Comments and Responses***

3. ***Finding:***

Yes___ No X Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: No significant environmental impacts were recognized in the assessment. Therefore, an environmental assessment is the appropriate level of analysis.

Name of person(s) responsible for preparation of EA:

Name: Jill Lippard

Title: Water Resources Specialist

Date: November 24, 2020